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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/583,717

06/20/2006

Hiroshi Rikimaru

IRD-0016

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EXAMINER

CHAWAN, VIJAY B

ART UNIT

PAPER NUMBER

2626

MAIL DATE

DELIVERY MODE

09/14/2009

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/583,717	Applicant(s) RIKIMARU, HIROSHI	
	Examiner Vijay B. Chawan	Art Unit 2626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Objections

1. Claims 1-20 are objected to because of the following informalities: It is not clear from the claim language how senility is prevented, and as such, no patentable weight is given to prevention of senility aspect. Appropriate correction is required.

Claims 11 and 12 appear to be the same claims, verbatim, and claims 13 and 16 depend upon either claims 11 or 12. It is not proper to have one dependent claim dependent on two different independent claims. For examining purpose, the claims are dependent only on claim 11. Similarly claim 3 depend on both 1 and 2, both independent claims. Rest of the claims need to be reviewed and corrected for errors such as these. Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 2, 9, 11, 12, and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Wright et al., (6,109,107).

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As per claim 1, 2, 9, 11, 12 and 19, Wright et al., teach an apparatus that constructs a noise-vocoded speech sound signal produced by dividing at least a portion of a speech signal into a frequency band signal and subjecting the frequency band signal to noise degradation, and outputs the Noise-Vocoded Speech Sound signal (Fig.2, Col.4, lines 13-58, Col.3, lines 29-48).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 3-8, 10, 13-18, 20 rejected under 35 U.S.C. 103(a) as being unpatentable over Wright et al., (5,303,327) in view of Applicant's admitted prior art.

Wright et al., do not explicitly teach wherein the noise-vocoded speech sound signal in which a component of sound signal is subjected to noise is generated, comprising: a first bandpass filter section having a plurality of bandpass filters for extracting a signal of a prescribed frequency band from the speech signal, an envelope extraction section having envelope extractors for extracting an envelope of each frequency band signal extracted by the first bandpass filter section, a second bandpass filter section having a plurality of bandpass filters for extracting a noise signal

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corresponding to the prescribed frequency band from a noise source signal, a multiplication section for multiplying outputs from the envelop extraction section and the second bandpass filter section for each frequency band, and an addition section for summing up outputs from the multiplication section to produce the Noise-Vocoded Speech Sound signal.

Applicant's admitted prior art teaches wherein the Noise-Vocoded Speech sound signal in which a component of a sound source signal is subjected to noise is generated by: extracted a frequency band signal with a predetermined frequency band from at least one portion of the sound signal by a first band filtering procedure having a plurality band filtering procedures; extracting an amplitude envelope of each frequency signal by an envelope extracting procedure; generating a frequency band noise signal corresponding to the predetermined frequency band from a noise source signal by a second band filtering procedure having a plurality of band filtering procedures; multiplying the frequency band signal by the frequency band noise signal in a multiplying procedure and accumulating outputs obtained by the multiplying procedure in an adding procedure (page 1, lines 17-25).

Therefore, it would have been obvious to one with ordinary skill in the art at the time of invention to modify the system of Wright et al., wherein the Noise-Vocoded Speech sound signal in which a component of a sound source signal is subjected to noise is generated by: extracted a frequency band signal with a predetermined frequency band from at least one portion of the sound signal by a first band filtering procedure having a plurality band filtering procedures; extracting an amplitude envelope

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of each frequency signal by an envelope extracting procedure; generating a frequency band noise signal corresponding to the predetermined frequency band from a noise source signal by a second band filtering procedure having a plurality of band filtering procedures; multiplying the frequency band signal by the frequency band noise signal in a multiplying procedure and accumulating outputs obtained by the multiplying procedure in an adding procedure as taught by Applicant's admitted prior art, because it would ensure that the noise is properly imposed within the required frequency bands.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Please see attached form PTO-892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vijay B. Chawan whose telephone number is (571) 272-7601. The examiner can normally be reached on Monday Through Friday 6:30-3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richemond Dorvil can be reached on (571) 272-7602. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Vijay B. Chawan/
Primary Examiner, Art Unit 2626

vbc
9/14/09